WHAT IS CLAIMED IS:

1. A solderability testing apparatus comprising:

a sample parts holding means having a sample parts holding member for holding a sample;

an external force detection means for supporting said sample parts holding means;

a solder paste container for containing a solder paste which is internally added with a flux; and

a heating means for heating the solder paste;

wherein said apparatus has a flux wetting preventive layer at least on the surface of a sample holding portion of the sample parts holding member.

2. The solderability testing apparatus as claimed in Claim 1, wherein a material composing the flux wetting preventive layer has a contact angle È to flux of larger than 90° .

3. The solderability testing apparatus as claimed in Claim 2, wherein the material composing the flux wetting preventive layer is a fluorocarbon resin.

4. The solderability testing apparatus as claimed in Claim 2, wherein the material composing the flux wetting preventive layer is cermet or ceramic.

5. A solderability testing apparatus comprising:

a sample parts holding means having a sample parts holding member for holding a sample;

an external force detection means for supporting said sample parts holding means;

a solder paste container for containing a solder paste which is internally added with a flux; and

a heating means for heating the solder paste;

wherein at least a sample holding portion of the sample parts holding member is made of a material having a poor wetting balance in respect of the flux.

6. The solderability testing apparatus as claimed in Claim 5, wherein a material composing the sample holding portion of the sample parts holding member has a contact angle È to flux of larger than 90° .

7. The solderability testing apparatus as claimed in Claim 6, wherein the material composing the flux wetting preventive layer is a fluorocarbon resin.

8. The solderability testing apparatus as claimed in Claim 6, wherein the material composing the flux wetting preventive layer is cermet or ceramic.

9. A solderability testing method using a solderability testing apparatus, said apparatus comprising:

a sample parts holding means having a sample parts holding member for holding a sample;

an external force detection means for supporting said sample parts holding means;

a solder paste container for containing a solder paste which is internally added with a flux; and

a heating means for heating the solder paste;

said apparatus having a flux wetting preventive layer at least on the surface of a sample holding portion of the sample parts holding member;

wherein said method comprises a step of heating and melting the solder paste using a heating means while keeping a

part of a sample, which is held by a sample parts holding member, being dipped therein, and measuring time-dependent changes in the acting force effected between the molten solder paste and the sample using the external force detection means.

10. The solderability testing method as claimed in Claim 9, wherein a material composing the flux wetting preventive layer has a contact angle È to flux of larger than 90° .

11. The solderability testing method as claimed in Claim 10, wherein the material composing the flux wetting preventive layer is a fluorocarbon resin.

12. The solderability testing method as claimed in Claim 10, wherein the material composing the flux wetting preventive layer is cermet or ceramic.

13. A solderability testing method using a solderability testing apparatus, which apparatus comprising:

a sample parts holding means having a sample parts holding member for holding a sample;

an external force detection means for supporting said sample parts holding means;

a solder paste container for containing a solder paste which is internally added with a flux; and

a heating means for heating the solder paste;

said apparatus having a flux wetting preventive layer at least on the surface of a sample holding portion of the sample parts holding member;

said sample parts holding member having a sample holding portion which is made of a material having a poor wetting balance in respect of the flux,

wherein said method comprises a step of heating and melting the solder paste using a heating means while keeping a part of a sample, which is held by a sample parts holding member, being dipped therein, and measuring time-dependent changes in the acting force effected between the molten solder paste and the sample using the external force detection means.

14. The solderability testing method as claimed in Claim 13, wherein a material composing the sample holding portion of the sample parts holding member has a contact angle È to flux of larger than 90°.

15. The solderability testing method as claimed in Claim 14, wherein the material composing the flux wetting preventive layer is a fluorocarbon resin.

16. The solderability testing method as claimed in Claim 14, wherein the material composing the flux wetting preventive layer is cermet or ceramic.